

WHAT IS CLAIMED IS:

1. A scanner comprising:

an optical reading unit which optically scans a
surface of an original and converts an image on the
5 surface of the original into image data;

a radio communication unit which, at the time of
scanning the original in which an IC chip having a
radio communication function has been embedded, by the
optical reading unit, carries out radio communication
10 with the IC chip; and

a control unit which optically scans the surface
of the original by the optical reading unit and
converts the image on the surface of the original into
image data when scanning of the original in which the
15 IC chip having a radio communication function has been
embedded is requested, and reads electric data recorded
in a memory in the IC chip built in the original, by
the radio communication unit.

2. The scanner according to claim 1, wherein the
20 control unit further records additional information
showing contents of processings with respect to the
original in the memory in the IC chip built in the
original, by the radio communication unit, at the time
of scanning the original in which the IC chip having a
25 radio communication function has been embedded.

3. The scanner according to claim 1, further
comprising:

a network interface which carries out data communication with an external device, wherein

the network interface respectively transfers the image data obtained by optically scanning the surface of the original by the optically reading unit and the electronic data read from the memory in the IC chip embedded in the original by the radio communication unit to the external devices.

4. A printer comprising:

an image forming unit which prints an image on a surface of an image forming medium;

a radio communication unit which, at the time of printing an image on the image forming medium in which an IC chip having a radio communication function is embedded, by the image forming unit, carries out radio communication with the IC chip; and

a control unit which, when image data to be printed on the image forming medium in which the IC chip having a radio communication function has been embedded is inputted thereto, prints an image based on the image data on the image forming medium by the image forming unit, and records the image data as electric data, by the radio communication unit, in a memory in the IC chip embedded in the image forming medium.

5. The printer according to claim 4, wherein, at the time of carrying out printing on the image forming medium by the image forming unit, the control unit

further records additional information showing contents of processings with respect to the image forming medium by the radio communication unit, in the memory in the IC chip embedded in the image forming medium.

5 6. The printer according to claim 4, further comprising

 a network interface which carries out data communication with an external device, wherein

 when a request for printing is received by the
10 network interface, the control unit carries out printing of an image on the surface of the image forming medium by the printer on the basis of print data received from the external device by the network interface, and records electronic data for being
15 wirelessly written received from the external device by the network interface, in the memory in the IC chip embedded in the image forming medium by the radio communication unit.

 7. A copying machine comprising:

20 an optical reading unit which optically scans a surface of an original, and converts an image on the surface of the original into image data;

 an image forming unit which prints an image on a surface of an image forming medium;

25 a radio communication unit which carries out radio communication with an IC chip embedded in the original or the image forming medium and having a radio

communication function; and

a control unit which carries out scanning of the original by the optical reading unit or printing on the image forming medium by the image forming unit, and
5 carries out reading or writing of electronic data by the radio communication unit with respect to a memory in the IC chip embedded in the original or the image forming medium.

8. The copying machine according to claim 7,
10 wherein

the radio communication unit carries out radio communication with the IC chip at the time of scanning the original in which the IC chip having a radio communication function has been embedded by the optical
15 reading unit, and

the control unit optically scans the surface of the original by the optical reading unit and converts the image on the surface of the original into image data, and reads the electric data recorded in the
20 memory in the IC chip built in the original by the radio communication unit, and prints the image on the surface of the image forming medium on the basis of the image data of the original which the optical reading unit acquired by the image forming unit, or the
25 electric data read from the memory in the IC chip by the radio communication unit.

9. The copying machine according to claim 7,

wherein

the radio communication unit carries out radio communication with the IC chip at the time of printing of the image on the surface of the image forming medium in which the IC chip having a radio communication function has been embedded, by the image forming unit, and

the control unit optically scans the surface of the original by the optical reading unit, converts the image on the surface of the original into image data, and prints an image based on the image data on the surface of the image forming medium by the image forming unit, and records the image data as electronic data in the memory in the IC chip embedded in the image forming medium by the radio communication unit.

10. The copying machine according to claim 7, wherein

the radio communication unit comprises a first radio communication unit which carries out radio communication with the IC chip at the time of scanning, by the optical reading unit, of the original in which the IC chip having a radio communication function has been embedded, and a second radio communication unit which carries out radio communication with the IC chip at the time of printing, by the image forming unit, of an image on the image forming medium in which the IC chip having a radio communication function has been

embedded, and

the control unit optically scans the surface of
the original by the optical reading unit and converts
the image on the surface of the original into image
5 data, and reads the electric data recorded in the
memory in the IC chip built in the original, by the
first radio communication unit, and

prints an image on the surface of the image
forming medium by the image forming unit on the basis
10 of the image data of the original acquired by the
optical reading unit, or the electric data read from
the memory in the IC chip of the original by the first
radio communication unit, and records the image data of
the original acquired by the optical reading unit, or
15 the electric data read from the memory in the IC chip
by the first radio communication unit, by the second
radio communication unit, in the memory in the IC chip
embedded in the image forming medium.

11. The copying machine according to claim 10,
20 further comprising

a control panel to which an instruction from a
user is inputted, wherein

the control unit selects whether data to be
printed on the image forming medium as an image by the
image forming unit is made to be the image data of the
25 original acquired by the optical reading unit, or to be
the electronic data read from the memory in the IC chip

of the original by the first radio communication unit,
in accordance with the instruction of the user with
respect to the control panel.

12. The copying machine according to claim 10
5 further comprising

a control panel to which an instruction from the
user is inputted, wherein

the control unit selects whether data to be
recorded by the second radio communication unit in the
10 memory in the IC chip embedded in the image forming
medium is made to be the image data of the original
which the optical reading unit acquired, or to be the
electronic data read from the memory in the IC chip of
the original by the first radio communication unit, in
15 accordance with the instruction of the user to the
control panel.